

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2009-473-W/S

IN RE:

Application of Tega Cay Water
Service, Inc. for adjustment of
rates and charges and modifications to
certain terms and conditions for the
provision of water and sewer service.

DIRECT TESTIMONY
OF
BRUCE T. HAAS

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Bruce T. Haas, and my business address is 110 Queen Parkway, West
Columbia, South Carolina 29169.

Q. WHERE ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am Regional Director of Operations for Tega Cay Water Service, Inc. for South
Carolina and for six other operating subsidiaries of Utilities, Inc., four of which are in South
Carolina and two of which are in Georgia.

**Q. HOW LONG HAVE YOU BEEN EMPLOYED IN THE WATER AND SEWER
UTILITY INDUSTRY?**

A. Approximately 31 years.

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

1 A. I first began my employment as a meter reader and maintenance worker in 1978
2 for Lake Holiday Utilities, Corp., which is also a subsidiary of the Company's parent,
3 Utilities, Inc. During the next several years, I was promoted to Operator and Operating
4 Manager positions for a number of Utilities, Inc. subsidiary systems, while earning
5 various water and wastewater licenses in Illinois and Ohio, including the highest levels of
6 water treatment and wastewater treatment licenses from the Illinois EPA. I eventually
7 became the Area Manager for the Peoria, Illinois region, overseeing the water and
8 wastewater facilities in this area. In 1989, I relocated to Charlotte, North Carolina taking
9 on the position of Area Manager for several areas for Carolina Water Service of North
10 Carolina, Inc., a sister subsidiary of the Company, a job I also performed for the
11 Company which involved operations of the River Hills and TCWS Systems in York
12 County, South Carolina. I was eventually promoted to Regional Manager while in
13 Charlotte. During this time I also obtained various water and wastewater licenses in
14 Water Treatment, Water Distribution, Wastewater Collection, and Backflow/Cross-
15 Connection certifications from the State of North Carolina and also took night courses
16 towards a degree in Civil Engineering Technology. I also earned the highest levels of
17 water and wastewater certifications for Water Treatment, Water Distribution, Wastewater
18 Treatment and Wastewater Collection from the State of South Carolina. Additionally, I
19 have successfully completed the utility regulation seminar sponsored by NARUC. In
20 2002, I was promoted to my current position and given responsibility for the Company's
21 systems in South Carolina, along with two subsidiary companies located in Georgia.

1 However, the majority of my time is spent working on issues pertaining to the
2 Company's South Carolina systems.

3
4 **Q. WHAT ARE YOUR DUTIES WITH TEGA CAY WATER SERVICE, INC.?**

5 A. I am responsible for making sure our customers receive the best possible water
6 and sewer utility service. As such, I am responsible for all operations personnel,
7 facilities, maintenance and capital projects as well as other operational issues. In
8 addition, I am responsible for communications with state and federal regulators,
9 including state utility commissions, public staffs in the states that have them, and
10 environmental authorities.

11
12 **Q. WOULD YOU DESCRIBE YOUR EXPERIENCE IN WORKING WITH OR**
13 **TESTIFYING BEFORE STATE UTILITY COMMISSIONS REGARDING RATE**
14 **CASES?**

15 A. Yes. I have testified before the commissions in North Carolina and South
16 Carolina, along with working with staff of the Illinois Commerce Commission during my
17 tenure with the Company.

18
19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING,**
20 **MR. HAAS?**

21 A. The purpose of my testimony is to provide the Commission with information
22 regarding the improvements that have been made to the Company's water and wastewater

1 systems serving TCWS. I will also support the Company's application with respect to its
2 transactions with an affiliated company.

3
4 **Q. MR. HAAS, WOULD YOU BRIEFLY DESCRIBE THE COMPANY'S WATER**
5 **AND SEWER OPERATIONS HERE IN SOUTH CAROLINA?**

6 A. Yes. Tega Cay Water Service, Inc., which I will refer to as TCWS or sometimes
7 the Company, currently serves over 1780 water customers and over 1690 wastewater
8 customers located in York County, South Carolina. We deliver safe and reliable water
9 service to our customer's homes through the purchase and resale of bulk water through
10 over twenty-four (24) miles of water distribution mains. We also provide sewer service
11 through nearly thirty-one (31) miles of wastewater collection facilities, (20) pump
12 stations, and (3) existing wastewater treatment plants.

13
14 **Q. WITHIN THE COMPANY, WHO IS RESPONSIBLE FOR ENSURING THAT**
15 **CUSTOMERS ARE RECEIVING THE BEST POSSIBLE UTILITY SERVICE?**

16 A. I have the overall responsibility for ensuring that our customers receive the best
17 possible utility service. In order to discharge this responsibility, I make every effort to
18 see that the company hires and maintains a highly qualified and professional staff of
19 individuals. Together, we continue to make sure that each and every TCWS employee
20 works toward providing safe and reliable utility service to its customers.

1 **Q. IN WHAT WAYS DOES THE COMPANY ENSURE THAT ITS CUSTOMERS**
2 **ARE PROVIDED THE BEST POSSIBLE UTILITY SERVICE?**

3 A. First and foremost, we make certain that our operations personnel are duly
4 certified by environmental regulatory authorities. We provide training resources in order
5 to increase their knowledge and education in the water and wastewater fields. Many of
6 our licensed operators hold the highest levels of water and wastewater certifications from
7 the State of South Carolina. We also hold periodic staff meetings to specifically address
8 service concerns including utility service problems we have encountered, steps taken to
9 solve these problems, new regulations and cost control measures. Continuing education
10 programs are provided for all employees, including classes routinely conducted by
11 Company staff as well as outside consultants. Our most valuable resource is our
12 personnel. By keeping up to date with new methods and changing regulations, we enable
13 them to provide better utility service and hold down costs.

14 In addition to the employee training, and other utility service programs, TCWS
15 also employs ongoing operational programs such as routine testing and periodic water
16 main flushing to improve water quality, the cleaning of sewer collection mains each year,
17 and a 24-hour-a-day, seven-day-a-week on-call emergency service. These programs also
18 ensure that company-wide facilities are properly maintained and safety standards met.

19
20 **Q. HAS THE COMPANY MADE IMPROVEMENTS TO ITS FACILITIES**
21 **SERVING CUSTOMERS IN YORK COUNTY?**

1 A. Yes. The Company employs a capital improvements program for both its water
2 and sewer systems. The Company continually makes other improvements to ensure that
3 its systems are able to provide safe and reliable water and sewer service to its customers.
4 A list of capital improvements and improvements in operational programs since the
5 Company's last rate case is attached to my testimony as Exhibit "A". I would note that
6 many of these improvements might not be noticeable to customers. However, all of them
7 have been made since our last rate case. As is noted in the testimony of Company
8 witness Lubertozzi, documentation of these expenses has been provided to the Office of
9 Regulatory Staff during its audit of the Company's books.

10 We also continue to work with entities such as the local Tega Cay Volunteer Fire
11 Department (TC-VFD) regarding our water distribution system, along with maintenance
12 data for our fire hydrants within the water system in order to document and help maintain
13 their current ISO Fire Ratings. Lower ratings also benefit customers by helping reduce
14 insurance rates charged to customers. We have also painted and color-coded all our
15 hydrants to match the color of our elevated tank to further identify ownership of facilities
16 within TCWS and to prevent confusion with other facilities that may be operated
17 separately by the City.

18
19 **Q. HAS INCREASED FEDERAL REGULATION OF THE WATER AND**
20 **WASTEWATER UTILITIES CONTINUED TO HAVE AN IMPACT ON THE**
21 **COMPANY?**

1 A. Absolutely, yes. The Safe Drinking Water Act, or SDWA and the Clean Water
2 Act, or CWA have changed the way in which water and sewer utilities conduct their
3 business. DHEC implements statutes and regulations adopted by the State of South
4 Carolina under these federal enactments. Additional costs have been placed upon water
5 and wastewater utilities to comply with more exacting limits in both areas. While we
6 have already complied with many of the requirements contained in the reauthorization of
7 the SDWA, new requirements continue to be promulgated. Likewise, the requirements of
8 the CWA continue to evolve.

9
10 **Q. WHAT IMPACT DOES THIS HAVE ON THE COMPANY'S CUSTOMERS?**

11 A. For one thing, the cost of providing service obviously increases; but, in turn our
12 customers receive the benefit of greater protection of their waterways and safer drinking
13 water that is free of harmful contaminants. Our customers also benefit from our
14 commitment to provide them with safe and reliable utility service which is reinforced by
15 compliance. Understandably, customers may be unaware of our efforts to meet
16 regulatory requirements since they do not necessarily see a perceptible change in the
17 quality of service and therefore, may also be largely unaware of the hidden benefits of
18 compliance. Without the benefits of compliance, residential development simply cannot
19 be sustained – much less begun. And, of course, these benefits accrue to the overall well-
20 being and value of the communities we serve.

1 **Q. MR. HAAS, DOES THE COMPANY SEEK TO INCLUDE ANY PAYMENTS TO**
2 **AFFILIATED ENTITIES?**

3 A. Yes. Included in the Company's test year expenses and included in capital
4 expenditures are payments to Bio-Tech, Inc. Bio-Tech is a South Carolina corporation
5 which, like TCWS, is a wholly-owned subsidiary of Utilities, Inc. Bio-Tech's business
6 currently focuses on sludge hauling and disposal. These services are regulated by DHEC,
7 which has issued a land application permit for Bio-Tech's disposal site on Old State Road
8 in Lexington County. As well, during the test year, Bio-Tech performed other types of
9 work for TCWS such as sewer rodding and other maintenance and repair of the
10 Company's facilities.

11
12 **Q. DOES BIO-TECH PROVIDE SERVICES ONLY TO THE COMPANY AND**
13 **OTHER WHOLLY-OWNED SUBSIDIARIES OF UTILITIES, INC.?**

14 A. No. Bio-Tech also serves other public utilities and governmentally owned
15 utilities such as municipalities, counties, special purpose districts and public service
16 districts.

17
18 **Q. HOW ARE BIO-TECH'S CHARGES FOR SERVICES TO THE COMPANY**
19 **DETERMINED?**

20 A. Bio-Tech charges the Company the same rates it charges to other similarly
21 situated customers. The transportation and disposal charges paid by TCWS is the same
22 as it is for any other customers, whether it is affiliated with the Company or not.

1 **Q. HAVE YOU COMPARED THE RATES CHARGED BY BIO-TECH TO THOSE**
2 **OF OTHER ENTITIES WHICH PROVIDE SIMILAR SERVICES TO**
3 **DETERMINE WHETHER THOSE CHARGES ARE REASONABLE?**

4 A. Yes, I have. I have recently surveyed several different companies which provide
5 services similar to those provided by Bio-Tech to TCWS during the test year. The results
6 of my comparison are attached to my direct testimony as Exhibit “B” and reflect the costs
7 which these companies would have charged to perform sludge hauling services for the
8 applicable TCWS systems. As the Exhibit reflects, many sludge hauling companies in
9 the area around Tega Cay, South Carolina do not provide hauling services for sludge
10 produced from wastewater treatment facilities with digesters such as those operated by
11 the Company. Rather, these providers only haul sludge primarily generated from
12 residential septic tanks and other small facilities. Although certain vendors which do
13 provide such services quoted a lower per gallon cost than Bio-Tech, TCWS determined
14 that the services offered by these companies were not comparable to those of Bio-Tech.
15 For instance, Bio-Tech is able to provide 24 hour on-call service, percent to solid testing,
16 and larger fleets which the other vendors do not.

17 Because many of the vendors in the area do not provide the services which would
18 be necessary to serve TCWS’s wastewater treatment plants, the Company also compared
19 rates which had been quoted to provide service to its sister companies. This analysis also
20 demonstrates that Bio-Tech’s charges and services are reasonable and comparable to
21 what is generally available in the marketplace. However, even for those vendors which
22 quoted an amount less than that currently charged by Bio-Tech to TCWS, certain vendors

1 are only able to provide disposal services, but not transportation services. Thus, an
2 additional cost in transporting the sludge to the disposal site would have to be incurred.
3 As well, other costs incurred with selecting certain vendors may make such services cost
4 prohibitive. For instance, the Company is aware that certain disposal locations require an
5 annual Toxicity Characteristic Leaching Potential (“TCLP”) test for each facility which
6 would add approximately \$800 to \$1,000 to the cost of sludge disposal. Additionally,
7 certain vendors do not provide the additional services I discussed earlier which Bio-Tech
8 is able to provide. In all, the charges imposed by Bio-Tech are very reasonable and
9 competitive with other services available in the market place. As well, TCWS would
10 have incurred greater cost if it had employed the services of other, non-affiliated
11 companies and would not have the benefit of the other services available through Bio-
12 Tech.

13
14 **Q. WITH RESPECT TO THE MAINTENANCE WORK PERFORMED BY BIO-**
15 **TECH DURING THE TEST YEAR, HOW WERE BIO-TECH’S CHARGES FOR**
16 **THESE SERVICES TO THE COMPANY DETERMINED?**

17 A. Bio-Tech charged the Company the same rates it charges to any other similarly
18 situated customer whether it is affiliated with the Company or not – including
19 governmental customers. Bio-Tech’s charged for water and wastewater plant
20 maintenance, repair and construction are the same for all of its customers, both affiliated
21 and unaffiliated. In other words, Bio-Tech’s charges to TCWS were at market rates.

1 **Q. WERE THERE ANY BIO-TECH EXPENSES INCLUDED IN THE COMPANY'S**
2 **LAST RATE PROCEEDING?**

3 **A.** Yes. The rates set in the Company's last rate case included expenditures paid to
4 Bio-Tech. This is also true for other UI operating subsidiaries in South Carolina,
5 including Carolina Water Service, Inc. and United Utility Companies, Inc., which have
6 previously received rate relief.

7
8 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.** Yes.

Capital Improvements

Tega Cay Water Service, Inc.

WWTP #2

- Replacement of security wire and sections of fencing for safety/security at the facility
- Replacement of appropriate RPZ –backflow devices for proper protection of the water distribution system
- Install fine-bubble diffusers in aeration basins
- Installed new decant pump for digester
- Replacement parts for gas chlorination equipment for disinfection
- Rebuild blower motor
- Install rebuilt blower #2 and align with motor

WWTP #3

- Replacement of dual cylinder chlorine scales
- Install fine-bubble diffusers in aeration basins
- Installed new decant pump for digester
- Replacement parts for gas chlorination equipment for disinfection
- Replace check valves on blower piping for aeration basins
- Installed remanufactured Hoffman Blower Unit

WWTP #4/Lab Area/Office

- Replacement Heat/A.C. unit for lab room/office
- Installation of safety eyewash station
- Fabricate and install barscreen at influent location
- Replaced Aqua-Matic valves and air cylinder for slide gate on Aero-Mod unit
- Replaced aerator motor in post-aeration chamber pond
- Installation of safety handrailing around #4 pond effluent chamber
- Install new sink and faucets for lab area

250,000 Gal. Elevated Storage Tank

- Installation of meter pit/meter to evaluate and control/prevent overflow situations at the Tank and document such non-account water

Water Distribution System

Replacement of water mains, blow-offs, service lines, meter boxes, corporation or curb-stops, etc. as necessary, including restoration/landscaping work or road repairs to restore water service to customers at various locations, including but not limited to the following locations:

- 9095 Pitcairn Dr.
- 9096 Pitcairn Dr.
- 16040 Samoa Ct.
- 3120 Point Clear
- 16101 Harbor Run
- Vacant lot – Tinura Ct.
- 27082 Catamaran
- 1102 Palmyra
- 9002 Windjammer
- 25014 Molokai Ext.
- 1051 Palmyra
- 11013 Seven Coves
- 29049 Snapper Point
- 2145 Manawa
- 27057 Catamaran
- 28006 Marina Dr.
- 2098 Diamond Head
- 9057 Tulagi
- 4145 Marquesas
- 2016 Marquesas
- 16121 Tara Tea
- 16122 Tara Tea
- 4067 Triton
- 29043 Snapper Point
- 16015 Kura Ct.
- Harbor Ct./Regatta Ct.
- 5022 Tara Tea
- 2013 Marquesas
- 16015 Kura Ct.
- 1135 Molokai
- 9049 Spanish Wells
- 7065 Harbor Ct.
- 8030 Windjammer
- 12095 Baywoods Dr.

- 25072 Woodhaven
- 25053 Timberlake
- 16023 Somoa
- 16100 Heron Run
- 1169 Molokai Dr.
- 31001 Executive Point
- 1110 Palmyra
- 1077 Gauguin Ln.
- 2135 Manawa
- Windjammer/Bora Bora Dr.
- 10022 Bora Bora
- 5024 Tara Tea
- 4157 Koala Circle
- 27057 Catamaran Dr.
- 4045 Windward
- 4051 Windward
- Tennis Courts at Tower – replaced water service
- 4167 Greenview Ct.
- 3016 Point Clear
- 29013 Silver Fox
- 2048 Marquesas
- 25076 Woodhaven
- 4041 Windward
- 3116 Pont Clear
- 2014 Marquesas
- 11155 Turtle Bay
- 11156 Turtle Bay
- 1062 Pago Pago
- 2024 Marquesas
- 2048 Manila Bay
- 11169 Water Trace
- 26021 Misty Way
- 7029 Chelsea Bay
- 12084 Spinnaker Dr.
- 26022 Misty Way
- Heron Harbor/Woodholm Ct.
- 9096 Pitcairn
- 8043 Windjammer
- 2044 Manila Bay

- 27096 Village Dr.
- 27057 Catamaran
- 27058 Catamaran
- 27059 Catamaran
- Intersection Triton/Executive Point
- 26011 Morningside
- 11091 Seven Coves Lane
- 11092 Seven Coves Lane
- 11114 Broken Brook Way
- 1126 Molokai Dr.
- 16116 Tana Tea
- 4088 Windward
- 10116 Tana Tea
- 27047 Catamaran
- 16111 Tana Tea
- Intersection Marquesas/Diamond Head Circle
- 7019 Chelsea Day
- 7001 Tega Cay Drive
- 2092 Diamond Head Circle
- 29038 Snapper Point
- 12024 Heron Harbor
- 2016 Marquesas
- 5026 Tara Tea
- 19019 Kailua Circle
- 4011 Windward

Wastewater Collection System

Replacement of sewer mains, service lines, laterals, cleanouts, manholes, etc. including restoration or landscaping work/road repairs to restore sewer service to customers at various locations, including but not limited to the following locations:

- 9095 Pitcairn Dr.
- 9096 Pitcairn Dr.
- 9063 Tulagi
- 9062 Tulagi
- 5066 Suwarrow Circle
- 1164 Molokai Dr.
- 1064 Gauguin Ln

- Materials – Concrete collars, etc. for raising various manholes
- 4152 Koala Circle
- 4105 Marquesas
- 3114 Point Clear
- 3122 Point Clear
- 1004 Palmyra
- 1006 Palmyra
- 1007 Palmyra
- Manhole # A-76 at Molokai Dr.
- MH# D-6 Heron Run
- MH# D-2 Heron Run
- MH# D-58 Heron Run
- MH39-20
- 9108 Pitcairn
- MH #73
- MH#32
- MH#50
- 16138 Tara Tea
- 26004 Morningside Dr.
- Palmyra Ct.
- 9048 Spanish Wells Ct.
- 28004 Marina Rd.
- 16084 Heron Run Dr.
- 16141 Tana Tea
- 8041 Windjammer
- 4045 Windward
- 4046 Windward
- 4094 Marquesas
- 4098 Marquesas
- 2009 Marquesas

Lift Stations

Various upgrades or replacements to lift stations including pumps, electrical controls, piping, valves, level controls, etc. including but not limited to the following locations:

- L.S.#12 – repipe, rebuilt pumps, new motor
- L.S.#17 – new motor starter
- L.S.#15 – New check valves/piping

- L.S. #12 – Install by-pass piping and valves
- L.S. #14 – installed new impellers and wear plates on pumps
- L.S. #7 – Install security fence
- L.S.#1 – New pumps, guide rails, chain and winch bracket
- L.S.#3 – Replace impellers
- L.S.#16 – Replaced pump and electrical controls/relay
- L.S.#14 – Replacement check valves and piping
- L.S.#5 – Replace drop piping

OTHER:

- Generator fuel pumping equipment for refueling as necessary
- Replacement cord #2/4 Cable and connector for emergency portable generator unit
- Install tool boxes and bed liner for vehicle
- Modifications to piping at Wellhouses #5 and #16 per DHEC requests for flushing locations and ensuring no cross-connections exist

Bio-Tech Charges

Customer	Sludge	E/I	Location	ST	Price per Gallon
Tega Cay	Sludge	INT	Tega Cay, SC 29708	SC	0.1100

Tega Cay Water Service, Inc. Facilities		L & L Environmental Services, LLC	City Plumbing	AMA Septic Tank Cleaning	Hudson Septic Tank Cleaning	Dover Septic Tank Cleaning	Hudson Septic Tank Cleaning
Tega Cay Area Operations							
Tega Cay WWTP		\$0.095 / gallon					
		\$95 per 1000 gallons	Will not provide service - does not accept sludge from digesters	Will not provide service - does not accept sludge from digesters	Will not provide service - does not accept sludge from digesters	Will not provide service - does not accept sludge from digesters	Will not provide service - does not accept sludge from digesters
Providers in other areas		P&S	American Waste	Higdon's	Disposal Site Only C.W. Degler (extra cost to transport)		
		Vac trk @ 3k = 32.7 ¢/gallon	\$0.20 / gallon	\$0.11 / gallon	\$0.09/gallon (Disposal only)		
		Tanker @ 6k = 30.3¢ /gallon	\$200 per 1000 gallons	\$110 per 1000 gallons			